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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,162	08/10/2001	Mark A. Autry	INTL-0627-US (P12027)	7312

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EXAMINER

TRUJILLO, JAMES K

ART UNIT

PAPER NUMBER

2116

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,162	Applicant(s) AUTRY, MARK A.	
	Examiner James K. Trujillo	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The office acknowledges the receipt of the following and placed of record in the file:

Request for Corrected Filing Receipt dated 10/12/01.

2. Claims 1-27 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi, U.S.

Patent 5,964,873 in view of Firooz et al., U.S. Patent 6,237,091.

5. As to claim 10, Choi substantially teaches a computer system comprising:

- a. a firmware memory storing an existing basic input/output system image (to-be-updated ROM BIOS) [col. 3 lines 43-53 and figure 4]; and a processor (not shown but inherent for the basic input/output system image to be programmed) to:
- b. modify a replacement basic input/output system image (with new user information, 113 and 117) by replacing a portion of the replacement basic input/output system image [figures 1A, 1B and col. 3 lines 29-43]; and
- c. write the modified replacement basic input/output system image to the firmware memory to replace (overwrite the old to-be-updated ROM BIOS image) the existing basic input/output system image [col. 3 lines 43-53].

Choi does not expressly disclose wherein the modification of the replacement basic input/output system image is *with a portion of the existing basic input/output system image* [emphasis added]. Specifically, Choi teaches using input from a user to modify the replacement basic input/output system to implement new user information.

Firooz teaches a system that modifies a replacement (firmware used for update) image with a portion (value from separate portion of memory containing information from the existing firmware) of an existing image (firmware to be updated) [318 figure 3 and col. 1 lines 21-27]. Firooz teaches using firmware images. Basic input/output system images are a type of firmware. Thus, the system of Firooz is similar to that of Choi in that both systems are directed toward updating firmware images. Firooz uses old user data from an existing image while Choi uses new user data. Firooz teaches that when replacing an image in some instances, portions of the existing image need to remain constant to prevent inappropriate operation [col. 2 lines 32-48].

It would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Choi and Firooz before him, to modify the replacement basic input/output system image disclosed by Choi with a portion of the existing basic input/output system image as taught by Firooz, in order to obtain desired previous portions of data such as configuration data. One of ordinary skill in the art would be motivated to make this modification in order preserve a portion of an existing image that has desired previous configuration data as taught by Firooz.

6. As to claim 11, Choi together with Firooz substantially taught the computer system according to claim 10 as described above. Choi together with Firooz further teach that the

portion of the existing basic input/output system image comprises configuration data for the computer system [Choi – col. 2 lines 61-64 and Firooz – col. 2 lines 42-45]. One of ordinary skill in the art would interpret user information to be configuration information.

7. As to claim 12, Choi together with Firooz substantially taught the computer system according to claim 11 as described above. Choi together with Firooz further teach wherein the configuration data comprises boot options [Choi – col. 2 lines 61-64 and Firooz – col. 2 lines 42-45]. One of ordinary skill in the art would interpret user information and configuration information to be boot options for the computer system because in Choi the information is directed to ROM BIOS information. ROM BIOS information is used during booting.

8. As to claim 13, Choi together with Firooz substantially taught the computer system according to claim 10 as described above. Choi together with Firooz teach wherein the portion of the existing basic input/output system image corresponds to a region of firmware memory locked from writes. Choi is directed toward ROM Bios [col. 1 lines 13-18] and Firooz is directed toward firmware in ROM [col. 1 lines 13-23]. Both Bios and firmware in a ROM would normally be write protected as is well known in the art.

9. As to claim 14, Choi together with Firooz substantially taught the computer system according to claim 10 as described above. It is inherent that Choi must contain system memory. Choi is directed toward the ROM Bios for a computer. For a computer to function properly it must use system memory. Choi discloses that the processor stores the replacement basic input/output system image (new ROM BIOS image data) in the system memory [col. 3 lines 14-17].

10. As to claim 15, Choi together with Firooz substantially taught the computer system according to claim 10 as described above. Choi together with Firooz do not expressly disclose wherein the processor compares the portion of the existing basic input/output system image with the portion of the replacement basic input/output system image to check for compatibility between the existing and replacement basic input/output system images.

Those of ordinary skill in the art would recognize that if portions of images were not compatible they would not function appropriately if one were used to replace the other. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Choi together with Firooz to compare the portion of the existing basic input/output ~~with the~~ ^{As e} portion of the replacement basic input/output system image to check for compatibility between the existing and replacement basic input/output system images. Those of ordinary skill in the art would have recognized that if the portions were not compatible the replacement basic input/output system image would not function correctly when the replacement portion is used to replace the existing portion.

11. As to claim 16, Choi together with Firooz substantially taught the computer system according to claim 15 as described above. Choi together with Firooz do not expressly disclose wherein the processor compares the size of the portion of the existing basic input/output system image with the size of the portion of the replacement basic input/output system image.

Those of ordinary skill in the art at the time of the invention would recognized that the portion of the existing basic input/output system image should not be different than the portion of the replacement basic input/output system image. If the existing portion size were different than the replacement portion it would mean that the existing portion was incorrectly copied.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Choi together with Firooz to compare the size of the portion of the existing basic input/output system image with the size of the portion of the replacement basic input/output system image to determine if the existing portion was copied correctly.

12. As to claim 17, Choi together with Firooz substantially taught the computer system according to claim 15 as described above. Choi together with Firooz do not expressly disclose wherein the processor compares the size of the location of the existing basic input/output system image with the location of the portion of the replacement basic input/output system image.

Those of ordinary skill in the art at the time of the invention would recognize that the portion of the existing basic input/output system image should not be larger than the portion of the replacement basic input/output system image. If the existing portion location were different than the replacement portion it would mean that the existing portion was incorrectly copied.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Choi together with Firooz to compare the location of the portion of the existing basic input/output system image with the location of the portion of the replacement basic input/output system image to determine if the existing portion was copied correctly.

13. As to claim 18, Choi together with Firooz substantially taught the computer system according to claim 10 as described above. Choi teaches wherein the firmware memory comprises FLASH memory [col. 1 lines 21-47].

14. As to claims 1- 9 and 19-~~13~~²² Choi together with Firooz taught the claimed computer system therefore together they also teach the claimed method and the claimed instructions stored on a computer readable medium.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 5,930,504 to Gabel. This patent teaches updating nonvolatile memory during booting of a computer.

U.S. Pat. No. 6,205,548 to Hasbun et al. This patent teaches updating nonvolatile memory during booting of a computer.

U.S. Pat. No. 6,308,265 to Miller. This patent teaches saving configuration data during booting of a computer.

U.S. Pat. No. 6,665,813 to Forsman et al. This patent teaches saving protected data during booting of a computer.

U.S. Pat. Application No. US 2002/0078338 to Lay et al. This patent teaches maintaining configuration data during a boot.

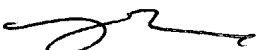
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (703) 308-6291. The examiner can normally be reached on M-F (7:30 am - 5:00 pm) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703)308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2116

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Trujillo
May 24, 2004


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